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10/773,559	02/06/2004	Hiromichi Kobayashi	1217-040223	3556
28:389 75:90 08/29/2008 THE WEBB LAW FIRM, P.C. 700 KOPPERS BUILDING			EXAMINER	
			LE, HOA VAN	
436 SEVENTI PITTSBURGE			ART UNIT	PAPER NUMBER
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			08/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/773 559 KOBAYASHI ET AL. Office Action Summary Examiner Art Unit Hoa V. Le 1795 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 19 August 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-15.17-19.32-38.40-51 and 56-58 is/are pending in the application. 4a) Of the above claim(s) 1-15.32-38 and 51 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 17-19,40-50 and 56-58 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 06 February 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsporson's Fatont Drawing Previow (PTO-948) 5) Notice of Informal Patent Application 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date \_ 6) Other:

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This is in response to Paper filed 08/19/08 and Interview dated on 08/25/08.

## Summary of interview dated on 08/25/08:

"Mr. Kent E. Baldauf states that changing names from the orginal invention of "Example 3" to the newly inserted language of "Comparative Example 5" should be allowed since they do not change any consideration, search, legal issue, allowability or patentability of the instant claims since they are the same as "Example 3" or "Example 5" because "Comparative" has no value in the newly inserted language "Comparative Example 5" since the chemical composition in "Example 3" and "Comparative Example 5" is the same. It is recognized that the composition is not changed. However, it is disagreed that changing the original language from "Example 3" to the newly inserted language of "Comparative Example 5" is found as new matter as clearly pointed out and set forth on the record. Examiner Hoa Van Le and Supervisor Cynthia Kelly request a certified translation from the priority Japanese document 2003-31407 on the record as evidence for the translation errors. Mr. Kent E. Baldauf states that (\*) there is no translation error and (\*\*) changing names are not subject to a submission of a certified translation. In response, the issue here is not just changing names but rather changing the invention in "Example 3" of the same embodiments to the newly inserted non-invention of "Comparative Example 5" after learning from the applied reference on the record. Mr. Kent E. Baldauf states that (\*) there is no description of the newly inserted langauge of "a soft ferrite material" as requested by Examiner Hoa Van Le and Supervisor Cynthia Kelly and (\*\*) the properties as described on pages 30 and 31 of the instant application show that the instant claimed carrier would only be " a soft ferrite.". In response, the arguments alone have and are given little to no value since they are not a factual evidnce. There is also no convincing evidence that the properties on pages 30 and 31 of the instant specification are not a hard ferrite. (3) Mr. Kent E. Baldauf states that the claims are allowable over the rejections on the record because the claims contain a specific particle diameter and none of the applied references discloses, teaches or suggests a particle diameter. Since applicants have refiled the application on 08/19/08, an updated search will be made. (4) Examiner Hoa Van Le and

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Supervisor Cynthia Kelly request Mr. Kent E. Baldauf to provide his own recodation of the substance of the interview."

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II. The amendment filed 09/24/08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The newly inserted language "wherein a part of the metal oxide (M<sup>H</sup>O) is independently present in the carrier core material" has no support and raises the issue of new matter.

Applicant is required to cancel the new matter in the reply to this Office

Action.

III. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The newly inserted language "wherein a part of the metal oxide (M<sup>H</sup>O) is independently present in the carrier core material" has no support and raises the issue of new matter.

- IV. Dependent claims 18-19, 40-50 and 56-58 are objected to and are not allowable until the independent claim 17 is overcome the new mater rejection in paragraph "III" above.
- V. The amendment filed 03/10/08 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention.
- (1) The newly deleted and added materials in (1) Tables 1, 2 and 3 in the instant specification are new matters. There is no support from the originally filed application. There is also no showing of supports from the priority Japanese document No. 2003-31407 filed on 02/07/2003.

A certified English language translation of a pertinent portion to support for the translation mistakes as now amended for corrections is requested and required for a close and careful consideration and examination.

An allowed specification or patent would have no value when someone is reasonably shown that there is not the same specification or patent as compared to that in the priority Japanese document specification or originally filed application.

(2) The newly inserted language "soft ferrite material" in independent claim 17 is new matter.

For a new matter issue, please see the authority in at least Tronzo v. Biomet Inc.,  $4\ USPQ\ 2d\ 1403$ .

One should be looked in to this issue because a benefit may be found and obtained. Applicants, assignee and/or their counsel have an obligation to provide fact and evidence to support for each of all inquiries being related to each of all new matters to a fully and completely satisfactory first before any other issue is considered and taken.

Applicant is required to cancel the new matter in the reply to this Office Action.

VI. The specification is not allowable until its overcome the objection to the new mater in Tables 1, 2 and 3.

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VII. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The newly inserted language "soft ferrite material" in independent claim 17 is new matter.

- VIII. Dependent claims 18-19, 40-50 and 56-58 are objected to and are not allowable until the independent claim 17 is overcome the new mater rejection in paragraph "VII" above.
- IX. Applicant's arguments filed 08/19/08 have been fully considered but they are not persuasive.

"The Applicants would like to note that support for the carrier core material being a soft ferrite material is provided on page 30, line 8 to page 31, line 8 of the specification of the present application. This portion of the specification describes different magnitization values of the carrier core material of the present invention. Specifically, this portion of the specification provides that the coercive force (Hc) of the carrier core material is usually not more than 50(103/47~A/m) (50 Oe), preflerably not more than 30(103/47e-A/m) (30 Oe), particularly preferably not more than 15(103/47e-A/m) (15 Oe), particularly preferably not more than 15(103/47e-A/m) (15 Oe).

In general, it is well known to those of ordinary skill in the art that a hard magnetic ferrite has an Hc of more than 1000 Oe, as evidenced by the attached documents (i) "HANDBOOK OF IMAGING MATERIALS" (see page 216) and (ii) "with Ferrite" (see last paragraph on page 151, of which an English translation is provided). On the other hand, the

Ho of the carrier core material of the present invention is not more than 50 Oe. Accordingly, one of ordinary skill in the art would classify the carrier core material as a soft ferrite material based on its coercive force value. Therefore, the specification provides adequate support for the carrier core material being a soft ferrite material. Reconsideration and withdrawal of these objections and rejections are respectfully requested."

Page 30, line 8 to page 31, line 8 of the specification as pointed out by applicants with assignee and their counsel support for the support of the newly inserted "soft ferrite material" is insufficient and non-conclusive since they are properties only. There is less than 50 oersted being disclosed. Page 216 of "HANDBOOK OF IMAGING MATERIALS" and a partial English translation of the Japanese publication as submitted on 08/19/08 show that less than 50 oersted is a property of a hard ferrite material but not a soft ferrite material. Figure 5.6 on page 216 of "HANDBOOK OF IMAGING MATERIALS" as submitted shows a soft ferrite material on the right hand side of the figure having high oersted than that of a hard ferrite material on the left hand side of the figure having low oersted.

In "HANDBOOK OF IMAGING MATERIALS" section 5.6.1 on page 215 to page 218 provides processing steps for determining a ferrite being either hard or soft material. Applicants should have provided tested results of the claimed carrier core. It is suggested, urged, requested and required to provide a convincing evidence since arguments alone have and are given little to no value since they are not a factual evidence as early and timely pointed out and set forth on the record. In a testing process, the language "not more than" in the claim, ---less than--- or the like include zero and negative value should be considered.

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Applicants with assignee and their counsel support misinterpretation of the teachings and/or suggestions in Figure 5.6 in "HANDBOOK OF IMAGING MATERIALS" section 5.6.1 on page 216 that a soft ferrite material having less or "not more than 50 0e". The figure 5.6 shows a hard ferrite material having less oersted "Oe" but not that of the soft one as misinterpreted and urged on the record.

X. Claims 17-19, 40-50 and 56-58 are rejected under 35 U.S.C. 103(a) as obvious over Ikeda et al (2003/0122918) considered in view Yamane et al (5,637,431), Takiguchi et al (6316,156) or Kukimoto et al (6,548,218) for a newly added Bi<sub>2</sub>O<sub>3</sub>

Ikeda et al disclose, teach and suggest a resin coated carrier core. The core comprises more than two groups of metal oxides, especially with one or more metal oxide groups of  $TiO_2$  and  $ZrO_2$ . For further details, please also see the whole disclosure of the applied reference, especially at least paragraphs 0056, 0061, 0066 to 0072, 0115, 0116, 0247.

Ikeda et al as newly amended do not specify  ${\rm Bi_2O_3}$  as newly added. However, it is known in the art at the time the invention was made to use  ${\rm Bi_2O_3}$  in a carrier for an advantage of controlling an electrical resistance. Evidence can

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be seen in one of Yamane et al at col.7:9-11, Takiguchi et al at col.9:18-20 or Kukimoto et al at col.5:22.

The language "...independent...", "melting point of not higher than 1000°C" "melting point of not lower than 1800°C" or "electrical resistivity...", "He of ...not more than 50 Oe", "soft ferrite material" or the like is a functional property or a measurement of a functional property of a material and considered inherent. For a patentability of a property or measurement of a property of a material, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence. An allowed claim or patent would have no value when someone shows to the same or obviously about the same property as set forth on the record using all possible combinations of the teachings and suggestions in the applied references.

For the newly added language "the carrier core material has average particle diameter of 15 to 70" microns, please see Ikeda et al at least paragraph 0052.

Since the above references are all related to carriers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite for a reasonable advantage of controlling an electrical

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resistance as disclosed, taught and suggested by one of the secondary references.

Applicant's arguments filed 08/19/08 have been fully considered but they are not persuasive.

Applicants recognize that Ikeda et al disclose, teach and suggest the use of  $V_2O_5$  as that in the instant application and hurriedly amend, change and alter the specification.

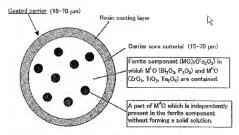
"On the other hand, the Ikeda application is directed to a magnetic-fineparticle-dispersed resin carrier comprising a carrier core and a resin coating layer with which the carrier core is coated. The carrier core comprises a magnetic metallic compound (e.g., ferrite) particles, non-magnetic metallic compound (e.g., TiO2, ZrO2) particles and a binder resin. The magnetic metallic compound particles and the non-magnetic metallic compound particles are dispersed in the binder resin. The magnetic metallic compound particles have a number-average particle diameter of from 0.02 gm to 2 gm and the non-magnetic metallic compound particles have a number-average particle claimeter of from 0.05 gm to 5 gm (see paragraphs [0040], [0041], [0046], [0047], [0066] to [0072], [0074], [0076], [0078] and [0086] of the Ikeda application)."

The instant claims are broad enough to read on the applied coated carrier core because there is no embodiment in the instant claims to exclude a sub-particle size

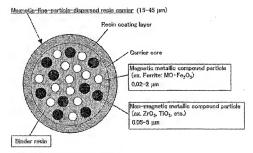
"However, the Ikeda application does not teach or suggest a positive significance for selecting TIQ2 or ZrOZ from many non-magnetic metallic compounds exemplified in paragraph [0072] thereof, and there is no Example using TIQ2 or ZrO2. In addition, the Ikeda application does not teach or suggest that the MLO (e.g., Bi203 or P2O5) is contained in the ferrite particles as in the present invention. The coated carrier of the present invention and the magnetic-particle-dispersed resin carrier of the Ikeda application are illustrated in the following schematic cross-sectional views."

An applicable embodiment from a reference is not required to be in a particular example. Should the instant claims be limited to an example in order for the arguments to have some merits?

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Coated carrier of the present invention



Resin carrier of the Ikeda application

In the resin carrier of the Ikeda application, the magnetic compound particles and the non-magnetic compound particles are dispersed in the binder resin. This is clearly shown in the above figures. On the other hand, in the coated carrier of the present invention, the carrier core material comprises the ferrite component, M<sup>1</sup>O and M<sup>2</sup>O and does not

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contain a binder resin. Accordingly, the ferrite component, the MLo and the MHo are not dispersed in a binder resin in the present invention."

Applicants with assignee and their counsel support state on and for the record that the claimed carrier core does not contain binder resin". The language "comprising" in the instant claims does not exclude an additional chemical ingredient.

In the above "present invention" figure, it is incorrect that the same diameter for core is the same as that of the coated core.

"In addition, independent claim 17 requires that at least a part of the MHo is independently present in the ferrite component. On the other hand, in the resin carrier of the Ikeda application, the non-magnetic compound (e.g., TiO2\_, ZrO\_2) particles are dispersed in the binder resin. Accordingly, the Ikeda application does not teach or suggest that the non-magnetic compound (e.g., TiO2\_ ZrO2) is contained in the magnetic compound (e.g., ferrite) particle, especially that at least a part of the non-magnetic compound (TiO2 or ZrO2) is independently dispersed inside the ferrite particle."

In the applied Ikeda et al, chemical ingredients (including titanium dioxide and zirconium dioxide) are independently added to form carrier cores.

"Further, the magnetic metallic compound (e.g., ferrite) particles of the Ikeda application are fine particles having a number-average particle diameter of from 0.02 gm to 2 p\_m\_. This provides an indication that the carrier of the Ikeda application has a volume-based 50% particle diameter (D50) of from 15 gm to 45 gm (see paragraph [0052] of the Ikeda application) is a resin carrier in which the magnetic fine particles are dispersed in a binder resin. On the other hand, the carrier core material of independent claim 17, which is made mainly of ferrite component, has an average particle diameter of 15 to 70 gin. Therefore, the magnetic metallic compound (e.g., ferrite) particle of the Ikeda application is very different from the carrier core material of independent claim 17 in the particle size. In addition, the carrier of the present invention is not a magnetic-fine-particle-dispersed resin carrier like the resin carrier fisclosed in the Ikeda application."

Applicants recognize that the applied Ikeda et al carrier cores having an average diameter of about 15 to 45 microns that is within that of the claimed 15 to 70 microns

"The Yamane patent, the Takiguchi patent and the Kukimoto patent each disclose magnetic particles and are provided by the Examiner as allegedly teaching the use of Bi203 in a carrier for controlling electrical resistance. These references do not cure the deficiencies of the likeda application discussed hereinabove. More specifically, these references do not teach or suggest that at least a part of the MI-o is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 cm."

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It is misinterpretations that the use of the secondary references with respect to Takiguchi et al and Kukimoto et al for farther teachings of a high meting point metal oxide and carrier core diameter. However, the record shows otherwise.

- XI. In view of the amendment to include particle size, the applied primary reference with respect to Uchida et al in the rejection on the record of "Claims 17-19, 40-50 and 53, 56-58 are rejected under 35 U.S.C. 103(a) as obvious over Uchida et al (5,874,019) considered in view Yamane et al (5,637,431), Takiguchi et al (6316,156) or Kukimoto et al (6,548,218) for a newly added Bi<sub>2</sub>O<sub>3</sub> is withdrawn.
- XII. Claims 17-19, 40-50 and 56-58 are rejected under 35 U.S.C. 103(a) as obvious over Baba et al (6,165,663) considered in view Yamane et al (5,637,431), Takiguchi et al (6316,156) or Kukimoto et al (6,548,218) for a newly added  $Bi_2O_3$ .

Baba et al disclose, teach and suggest a resin coated carrier core. The core comprises more than two groups of metal oxides, especially with one or more metal oxide groups of TiO<sub>2</sub> and ZrO<sub>2</sub>. For further details, please also see the whole disclosure of the applied reference, especially at least col.6:39, 52, 53, 10:37-40. The language "...independent...", "melting point of not higher than

1000°C" "melting point of not lower than 1800°C" or "electrical resistivity...",
"He of ...not more than 50 Oe", "soft ferrite material" or the like is a functional
property or a measurement of a functional property of a material and considered
inherent. For a patentability of a property or measurement of a property of a
material, it is allowed by law to request and require applicants to convincingly
show or provide an evidence to the contrary since arguments alone are not a
factual evidence. An allowed claim or patent would have no value when
someone shows to the same or obviously about the same property as set forth
on the record using all possible combinations of the teachings and suggestions
in the applied references.

Baba et al as newly amended do not specify  $\mathrm{Bi}_2\mathrm{O}_3$  as newly added. However, it is known in the art at the time the invention was made to use  $\mathrm{Bi}_2\mathrm{O}_3$  in a carrier for an advantage of controlling an electrical resistance. Evidence can be seen in one of Yamane et al at col.7:9-11, Takiguchi et al at col.9:18-20 or Kukimoto et al at col.5:22.

The language "...independent...", "melting point of not higher than 1000°C" "melting point of not lower than 1800°C" or "electrical resistivity...", "Hc of ...not more than 50 Oe", "soft ferrite material" or the like is a functional property or a measurement of a functional property of a material and considered

inherent. For a patentability of a property or measurement of a property of a material, it is allowed by law to request and require applicants to convincingly show or provide an evidence to the contrary since arguments alone are not a factual evidence. An allowed claim or patent would have no value when someone shows to the same or obviously about the same property as set forth on the record using all possible combinations of the teachings and suggestions in the applied references.

For the newly added language "the carrier core material has average particle diameter of 15 to 70" microns, please see Baba et al at least col.12:59-60.

Since the above references are all related to carriers, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite for a reasonable advantage of controlling an electrical resistance as disclosed, taught and suggested by one of the secondary references.

Applicant's arguments filed 08/19/08 have been fully considered but they are not persuasive.

<sup>&</sup>quot;The magnetic coated carrier disclosed in the Baba patent is similar to the magnetic-fine-particle-dispersed resin carrier disclosed in the Ikeda application discussed hereinabove. In other words, the Baba patent discloses a magnetic coated carrier having a

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carrier core and a resin coating layer with which the carrier core is coated. The carrier core comprises magnetic metal oxide (e.g., ferrite) particles, non-magnetic metal oxide (e.g., TiO2, ZrO2) particles and a binder resin. The magnetic metal oxide particles and the non-magnetic metal oxide particles are dispersed in the binder resin. The magnetic metal oxide particles have a number-average particle diameter of from 0.02 -4m to 2 -4m and the non-magnetic metal oxide particles have a number-average particle diameter of from 0.05 -4m to 5 -4m (see column 5, lines 36-53 and column 7, lines 5-16 and 29 of the Baba patent).

Accordingly, the Baba patent does not teach or suggest that at least a part of the MHO is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 ~tm."

In the applied Baba et al, chemical ingredients (including titanium dioxide and zirconium dioxide) are independently added to form carrier cores.

For the newly added language "the carrier core material has average particle diameter of 15 to 70" microns, please see Baba et al at least col.12:59-60 with respect to that of 15 to 50 microns.

"The Yamane patent, the Takiguchi patent and the Kukimoto patent each disclose magnetic particles and are provided by the Examiner as allegedly teaching the use of Bi203 in a carrier for controlling electrical resistance. These references do not cure the deficiencies of the likeda application discussed hereinabove. More specifically, these references do not teach or suggest that at least a part of the MHO is independently present in the carrier core material, or that the carrier core material has an average particle diameter of 15 to 70 -tm.

It is misinterpretations that the use of the secondary references with respect to Yamane et al, Takiguchi et al and Kukimoto et al for further teachings of a high meting point metal oxide and carrier core diameter. However, the record shows otherwise.

XIII. If applicants would like the submissions of "HANDBOOK OF IMAGING MATERIALS" and the Japanese publication as submitted on

08/19/08 to be cited in a possible patent, a proper and timely submission them in FORM PTO-1449 should be submitted.

XIV. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332.

The examiner can normally be reached from 7:30 AM to 4:30 PM on Monday though Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoa V. Le/ Primary Examiner, Art Unit 1795 082708